Application No.: 10/713,278 Docket No.: 1155-0274P

AMENDED CLAIM SET:

1. (currently amended) A polar group-containing olefin copolymer comprising a constituent unit represented by the following formula (1), a constituent unit represented by the following formula (2) and a constituent unit represented by the following formula (3), having a molecular weight distribution (Mw/Mn) of not more than 3, and having an intensity ratio of [[TIII]] $T\alpha\beta$ to $T\alpha\alpha$ ($T\alpha\beta/T\alpha\alpha$), as determined from a $^{13}C-NMR$ spectrum of said copolymer, of not more than 1.0:

wherein R^1 and R^2 may be the same or different and are each a hydrogen atom or a straight-chain or branched aliphatic hydrocarbon group of 1 to 18 carbon atoms; R^3 is a straight-chain hydrocarbon group of 11 or more carbon atoms; R^4 is a hetero atom or a group containing a hetero atom; r is 0 or 1; x is a polar group selected from an alcoholic hydroxyl group, a phenolic hydroxyl group, a carboxylic acid group, a carboxylic acid ester group, an acid anhydride group, an amino group, an amide group, an epoxy group and a mercapto group; p is an integer of 1 to 3; and when p is 2 or 3, each x may be the same or different, and in this case, if x is 0, x may be bonded to the same or different atom of x0, and if x1 is 1, x2 may be bonded to the same or different atom of x1.

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2. (cancelled).

- 3. (previously presented) The polar group-containing olefin copolymer of claim 1, wherein X in the constituent unit represented by the formula (3) is a polar group selected from a phenolic hydroxyl group, a carboxylic acid ester group, an acid anhydride group, an amino group, an amide group, an epoxy group and a mercapto group.
- 4. (previously presented) The polar group-containing olefin copolymer of claim 1, wherein \mathbb{R}^1 in the constituent unit represented by the formula (1) and \mathbb{R}^2 in the constituent unit represented by the formula (2) are each a hydrocarbon group of 2 or more carbon atoms and the crystallinity of said copolymer, as determined by X-ray diffractometry, is not less than 10 %.
- 5. (previously presented) The polar group-containing olefin copolymer of claim 1, wherein \mathbb{R}^1 in the constituent unit represented by the formula (1) and \mathbb{R}^2 in the constituent unit represented by the formula (2) are each a hydrocarbon group of 2 or more carbon atoms and the crystallinity of said copolymer, as determined by X-ray diffractometry, is less than 10 %.
- 6. (currently amended) A branched type polar group-containing olefin copolymer comprising a constituent unit represented by the following formula (1) and a constituent unit represented by the following formula (4), and optionally a constituent unit represented by the following formula (5),

having a molecular weight distribution (Mw/Mn) of not more than 3, and having an intensity ratio of [[TD]] $\underline{T}\alpha\beta$ to $\underline{T}\alpha\alpha$ ($\underline{T}\alpha\beta/\underline{T}\alpha\alpha$), as determined from a $\underline{^{13}C}$ -NMR spectrum of said copolymer, of not more than 1.0:

wherein R¹ is a hydrogen atom or a straight-chain or branched aliphatic hydrocarbon group of 1 to 18 carbon atoms; R^5 is a hydrocarbon group; R⁶ is a hetero atom or a group containing a hetero atom; r is 0 or 1; Z is a polymer segment obtained by any one of anionic polymerization, ring-opening polymerization and polycondensation; W is a hydroxyl group or an epoxy group; p is an integer of 1 to 3, q is 0, 1 or 2, and p+q \leq 3; when p is 2 or 3, each -O-Z may be the same or different, and in this case, if r is 0, -O-Z may be bonded to the same or different atom of \mathbb{R}^5 , and if r is 1, -O-Z may be bonded to the same or different atom of R^6 ; when q is 2, each W may be the same or different, and in this case, if r is 0, W may be bonded to the same or different atom of R⁵, and if r is 1, W may be bonded to the same or different atom of R^6 ; in case of $p\geq 1$ and $q\geq 1$, if r is 0, W and -0-Z may be bonded to the same or different atom of R^5 , and if r is 1, W and -O-Z may be bonded to the same or different atom of R6; m is 0 or 1; n is an integer of 1 to 3; and when n is 2 or 3, each W may be the same or different, and in this

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case, if m is 0, W may be bonded to the same or different atom of \mathbb{R}^6 , and if m is 1, W may be bonded to the same or different atom of \mathbb{R}^7 .

- 7. (previously presented) The branched type polar group-containing olefin copolymer of claim 6, wherein, in the formula (4), r is 0 and Z is a polymer segment obtained by anionic polymerization.
- 8. (previously presented) The branched type polar group-containing olefin copolymer of claim 6, wherein, in the formula (4), Z is a polymer segment obtained by ring-opening polymerization or polycondensation.
- 9. (currently amended) A polar group-containing olefin copolymer comprising a constituent unit represented by the following formula (1) and a constituent unit represented by the following formula (6) and, optionally a constituent unit represented by the following formula (3), having a molecular weight distribution (Mw/Mn) of not more than 3, and having an intensity ratio of [[TD]] $\underline{T}\alpha\beta$ to $\underline{T}\alpha\alpha$ ($\underline{T}\alpha\beta/\underline{T}\alpha\alpha$), as determined from a $\underline{^{13}C}$ -NMR spectrum of said copolymer, of not more than 1.0:

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wherein R^1 is a hydrogen atom or a straight-chain or branched aliphatic hydrocarbon group of 1 to 18 carbon atoms; R3 is a hydrocarbon group; R^4 is a hetero atom or a group containing a hetero atom; R^7 is a direct bond or an aliphatic hydrocarbon group of 1 or more carbon atoms; R⁸ is a hydrogen atom, a direct bond or an aliphatic hydrocarbon group of 1 or more carbon atoms; Y is a polar group containing O and/or N; m and n are each an integer of 0 to 2, and m+n is not 0; s is 0 or 1; r is 0 or 1; X is a polar group selected from an alcoholic hydroxyl group, a phenolic hydroxyl group, a carboxylic acid group, a carboxylic acid ester group, an acid anhydride group, an amino group, an amide group, an epoxy group and a mercapto group; p is an integer of 1 to 3; when p is 2 or 3, each X may be the same or different, and in this case, if r is 0, X may be bonded to the same or different atom of R^3 , and if r is 1, X may be bonded to the same or different atom of R^4 .

10. - 27. (cancelled).